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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,230	03/16/2000	Junji Nishigaki	325772015900	2557

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MORRISON & FOERSTER LLP
1650 TYSONS BOULEVARD
SUITE 300
MCLEAN, VA 22102

EXAMINER	
TRAN, DOUGLAS Q	
ART UNIT	**PAPER NUMBER**
2624	7

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/527,230	NISHIGAKI, JUNJI	
	Examiner	Art Unit	
	Douglas Q. Tran	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6-7, 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuroshima et al. (US Patent No. 6,421,134 B1).

As to claim 1, Kuroshima teaches an image processing apparatus (i.e., the apparatus in fig. 1 for processing image data stored in the memory "col. 5, lines 9-13") comprising:

a memory (i.e., a main memory 2 in figure 1 including the image memory "IMEM" in figure 2) for storing image data (col. 6, lines 14-17 describes that an image data of 400 dpi of the ship 22 "in figure 5" is read by the scanner 14 "in fig. 1"and stored in the image area IMEM in the memory 2);

a designating means (i.e., the CPU 1 in fig. 1) for designating the image size (i.e., the image size of the image data of the ship, which is designated for displaying on the window 20 "in fig. 5 and col. 5, lines 15-19 and col. 6, lines 22-26", would be 100 dpi "and please see 100 dpi on S2 of fig. 4"; and the CPU 1 would have a function for designating the image size to the display means "i.e., CRT 5 in fig. 1" because the CPU 1 controls the functions of the entire apparatus and also effects the image editing operation and image processing according to a

system program stored in the a memory 2 "col. 5, lines 5-12" and also effects to compressing operation "col. 5, lines 23-24");

a compressing system (i.e., a compression/expansion circuit 8 in fig. 1) which compress the image data by a compression method (i.e., JBIG method "col. 5, lines 27-28") corresponding to the image size designated with the designating means and send the compressed image data to the memory (col. 6, lines 17-21 describes that the original image data of 400 dpi is converted by the compression/expansion circuit 8 into lower resolution of 100 dpi and the converted image data is stored back in the image data IMEM of the main memory 2).

As to claim 6, Kuroshima discloses every feature discussed in claim 1, and Kuroshima further teaches that an expansion system (i.e., the compression/expansion circuit 8 in fig. 1) which expand the image data stored in the memory by a expansion method corresponding to the compression method which image size designated with the designating means and send the compressed image data to the memory (col. 5, lines 23-29 describes that, in case of the compressed image data of 12.5 dpi, the compression/expansion circuit 8 in fig. 1 also expands the compressed image data of 12.5 to the image data of 400 dpi in the JBIG method; col. 5, lines 62-67 also describes that, in the data expansion, the image data of minimum resolution "12,5dpi", and the corresponding encoded data are utilized for preparing the image data of an upper rank "25 dpi" and up to the original image data of 400 dpi).

As to claim 7, Kuroshima teaches an image processing apparatus (i.e., the apparatus in fig. 1 for processing image data stored in the memory "col. 5, lines 9-13") comprising:

a memory (i.e., a main memory 2 in figure 1 including the image memory "IMEM" in figure 2) for storing image data (col. 6, lines 14-17 describes that an image of the ship 22 "in

figure 5" is read by the scanner 14 "in fig. 1"and stored in the image area IMEM in the memory 2);

a designating means (i.e., the CPU 1 in fig. 1) for designating the image size (i.e., the image size of the image data of the ship, which is designated for displaying on the window 20 "in fig. 5 and col. 5, lines 15-19 and col. 6, lines 22-26", would be 100 dpi "and please see 100 dpi on S2 of fig. 4"; and the CPU 1 would have a function for designating the image size to the display means "i.e., CRT 5 in fig. 1" because the CPU 1 controls the functions of the entire apparatus and also effects the image editing operation and image processing according to a system program stored in the a memory 2 "col. 5, lines 5-12" and also effects to compressing operation "col. 5, lines 23-24");

a compression system (i.e., a compression/expansion circuit 8 in fig. 1) which includes a first compression method (i.e., JBIG method "col. 5, lines 27-28") for first compressing the image data and a second compression method (i.e., JBIG method "col. 5, lines 27-28") for second compressing the image data compressed by the first compression method (col. 6, lines 49-57 describes that for displaying the image data of 100 dpi at the displaying means "i.e., CRT 5 in fig. 1", the original image data of 400 dpi from scanner 14 is compressed by two steps wherein the compressed image data of 100 dpi is obtained. Figure 9 shows 400 dpi is compressed to 200 dpi in step at C1 and 200 dpi is compressed to 100 dpi in step at C2. Therefore, a second compression method for second compressing the image data compressed by the first compression method. It is noted that the above compression methods would be the JBIG method "col. 5, lines 27-28"); and

a controller (i.e., the CPU 1 in fig. 1) which controls practice of the second compression method corresponding to the image size designated with the designating means (i.e., the image size of the image data of the ship, which is designated for displaying on the window 20 "in fig. 5 and col. 5, lines 15-19 and col. 6, lines 22-26", would be 100 dpi "and please see 100 dpi on S2 of fig. 4"; and the CPU 1 controls the functions of the entire apparatus and also effects the image editing operation and image processing according to a system program stored in the a memory 2 "col. 5, lines 5-12" and also effects to compressing operation "col. 5, lines 23-24". Therefore, the CPU 1 would have a function for controlling practice of the second compression method corresponding to the image size designated with the designating means for displaying the second-compressed image data of 100 dpi to the display means "i.e., CRT 5 in fig. 1").

As to claim 13, Kuroshima discloses a method to image processing apparatus (i.e., the apparatus in fig. 1 for processing image data stored in the memory "col. 5, lines 9-13") having a memory (i.e., a main memory 2 in figure 1 including the image memory "IMEM" in figure 2) for storing image data (col. 6, lines 14-17 describes that an image of the ship 22 "in figure 5" is read by the scanner 14 "in fig. 1"and stored in the image area IMEM in the memory 2), the method comprising the steps of:

designating the image size of the image data (i.e., the image size of the image data of the ship, which is designated for displaying on the window 20 "in fig. 5 and col. 5, lines 15-19 and col. 6, lines 22-26", would be 100 dpi "and please see 100 dpi on S2 of fig. 4");

compressing the image data based on the designation of the designating step (col. 6, lines 17-21 describes that the original image data of 400 dpi is converted by the compression/expansion circuit 8 into lower resolution of 100 dpi); and

storing the image data to the memory (col. 6, lines 19-21 describes that the converted image data of 100 dpi is stored back in the image data IMEM of the main memory 2).

As to claim 14, Kuroshima discloses every feature discussed in claim 13, and Kuroshima further teaches that the compressing step includes a first compression method for first compressing the image data and a second compression method for second compressing the image data compressed by the first compression method (col. 6, lines 49-57 describes that for displaying the image data of 100 dpi at the display means "i.e., CRT 5 in fig. 1", the original image data of 400 dpi from scanner 14 is compressed by two steps wherein the compressed image data of 100 dpi is obtained. Figure 9 shows 400 dpi is compressed to 200 dpi in step of C1 and 200 dpi is compressed to 100 dpi in step of C2. Therefore, a second compression method for second compressing the image data compressed by the first compression method. It is noted that the above compression methods would be the JBIG method "col. 5, lines 27-28").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroshima et al. (US Patent No. 6,421,134 B1) as applied to claim 13 above, and in combination with Yamagami (US Patent No. 5,745,251).

As to claim 15, Kuroshima discloses every feature discussed in claim 13.

However, Kuroshima does not teach the compressing step includes fixed-length compression method and variable-length compression method.

Yamagami, in the same field of endeavor "an image processing apparatus in figure 2 for processing and compressing image data from the image pickup device 2" , teaches the compressing step includes fixed-length compression method and variable-length compression method (col. 7, lines 18-23 describes that any encoding method may be employed if it is a method which is capable of performing both of the fixed-length compression and the variable-length compression).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the compression step of Kuroshima to include fixed-length compression method and variable-length compression method for compressing the image data as taught by Yamagami. The suggestion for modifying the image processing system of Kuroshima can be reasoned by one of ordinary skill in the art as set forth above by Yamagami because the modified image processing system of Kuroshima would increase the flexibility and efficiency of processing method for compressing the image data by both of the fixed-length compression and the variable-length compression. The resultant systems would allow the recording medium to record a satisfactory number of images while preventing the image quality deterioration (col. 7, lines 32-37).

Allowable Subject Matter

5. Claims 2-5, and 8-12 are objected.

Claims 2 and 5 are objected to as being dependent upon a rejected base claim 1, and claims 8- 9 and 11 are objected to as being dependent upon a rejected base claim 7, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for objecting:

As to claim 2, the prior art, taken either singly or in combination, does not teach "the compression system include a first compression method which allows image editing in a compression state and a second compression which not allow image editing in a compressed state".

As to claim 5, the prior art, taken either singly or in combination, does not teach "both compression and storage to memory are executed in parallel for each color of four color yellow, magenta, cyan and black of the image data".

As to claim 8, the prior art, taken either singly or in combination, does not teach " said first compression method is fixed-length compression method and said second compression method is variable-length compression method".

As to claim 9, the prior art, taken either singly or in combination, does not teach "a plural image forming unit which forms an image based on the image data stored in the memory".

As to claim 11, the prior art, taken either singly or in combination, does not teach " a paper supply unit which supplies sheet for image forming".

Response to Arguments and Amendment

Applicant's arguments filed 9/11/03 have been fully considered but they are not persuasive.

Applicant asserted in page 7 that " Kuroshima does not disclose compressing the image data according to its size ". In reply, Kuroshima clearly teaches a designating means (i.e., the CPU 1 in fig. 1) for designating the image size (i.e., the image size of the image data of the ship, which is designated for displaying on the window 20 "in fig. 5 and col. 5, lines 15-19 and col. 6, lines 22-26", would be 100 dpi "and please see 100 dpi on S2 of fig. 4"; and the CPU 1 would have a function for designating the image size to the display means "i.e., CRT 5 in fig. 1" because the CPU 1 controls the functions of the entire apparatus and also effects the image editing operation and image processing according to a system program stored in the a memory 2 "col. 5, lines 5-12" and also effects to compressing operation "col. 5, lines 23-24"); and

a compressing system (i.e., a compression/expansion circuit 8 in fig. 1) which compress the image data by a compression method (i.e., JBIG method "col. 5, lines 27-28") corresponding to the image size designated with the designating means and send the compressed image data to the memory (col. 6, lines 17-21 describes that the original image data of 400 dpi is converted by the compression/expansion circuit 8 into lower resolution of 100 dpi and the converted image data is stored back in the image data IMEM of the main memory 2).

Although Kuroshima does not teach the compressing step includes fixed-length compression method and variable-length compression method, Yamagami, in the same field of endeavor "an image processing apparatus in figure 2 for processing and compressing image data from the image pickup device 2" , teaches the compressing step includes fixed-length

compression method and variable-length compression method (col. 7, lines 18-23 describes that any encoding method may be employed if it is a method which is capable of performing both of the fixed-length compression and the variable-length compression). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the compression step of Kuroshima to include fixed-length compression method and variable-length compression method for compressing the image data as taught by Yamagami. The suggestion for modifying the image processing system of Kuroshima can be reasoned by one of ordinary skill in the art as set forth above by Yamagami because the modified image processing system of Kuroshima would increase the flexibility and efficiency of processing method for compressing the image data by both of the fixed-length compression and the variable-length compression. The resultant systems would allow the recording medium to record a satisfactory number of images while preventing the image quality deterioration (col. 7, lines 32-37).

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

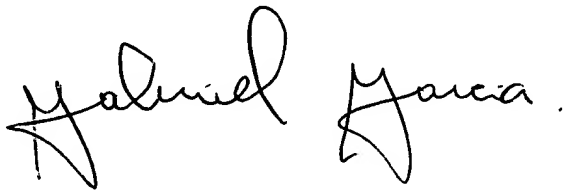
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Dec 14, 2003



GABRIEL GARCIA
PRIMARY EXAMINER